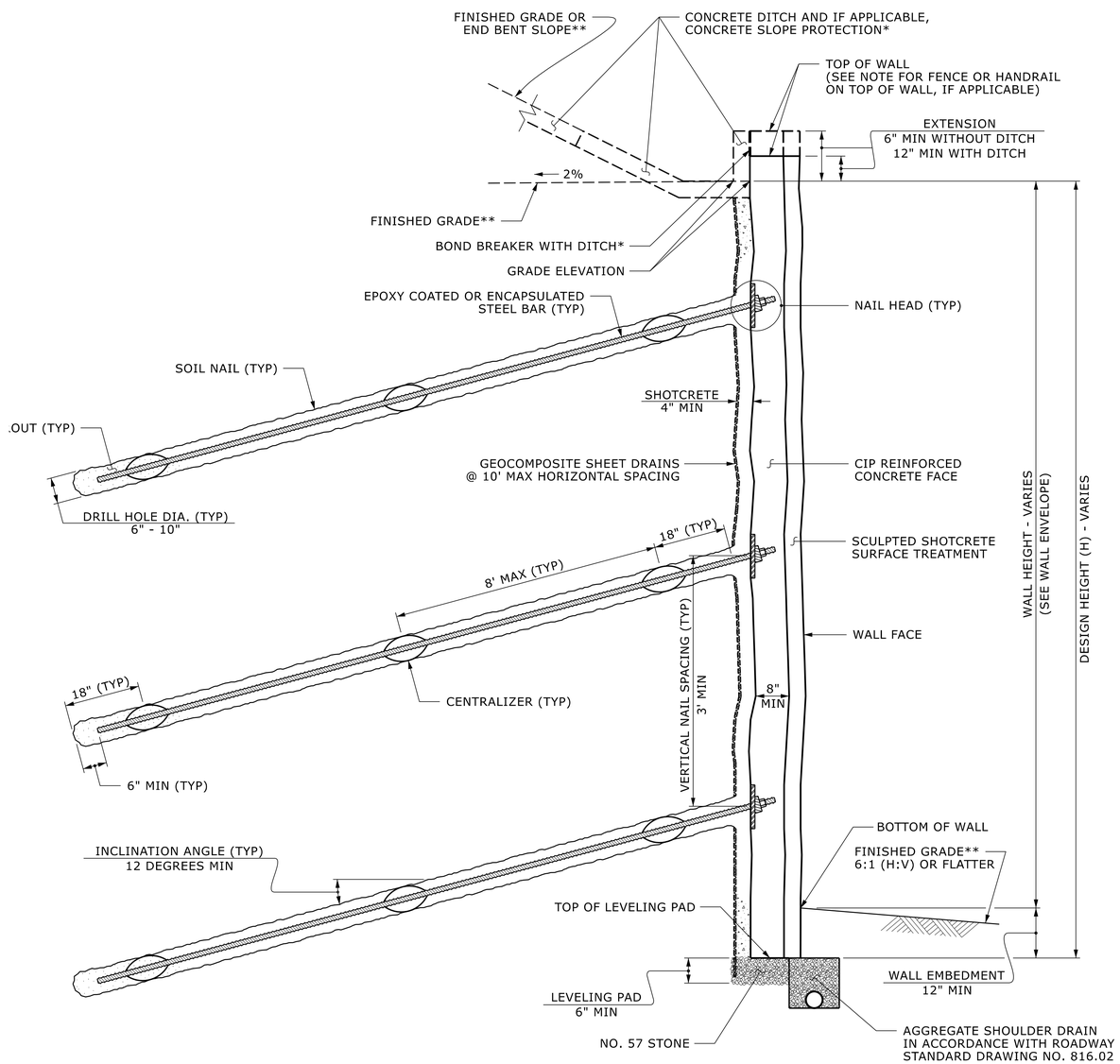

SOIL NAIL WALL - TYPICAL SECTION

*SEE CONCRETE DITCH BEHIND WALL DETAILS.
**SEE PLANS FOR FINISHED GRADE OR END BENT SLOPE DETAILS.

NOTES:

FOR SOIL NAIL RETAINING WALLS, SEE SOIL NAIL RETAINING WALLS PROVISION.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

A FENCE OR HANDRAIL IS REQUIRED ON TOP OF RETAINING WALL NO. 26. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.

A SCULPTED SHOTCRETE SURFACE TREATMENT IS REQUIRED FOR THE CIP REINFORCED CONCRETE FACE FOR RETAINING WALL NO. 26.

BEFORE BEGINNING SOIL NAIL WALL DESIGN FOR RETAINING WALL NO. 26, SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

DESIGN RETAINING WALL NO. 26 FOR THE FOLLOWING:
1) DESIGN HEIGHT (H) = WALL HEIGHT + WALL EMBEDMENT
2) DESIGN LIFE = 100 YEARS
3) IN-SITU ASSUMED MATERIAL PARAMETERS:
   UNIT WEIGHT, γ = 120 PCF
   FRICTION ANGLE, φ = 26 DEGREES
   COHESION, c = 50 PSF

FOUNDATIONS FOR SIGNS, LIGHTING or SIGNALS WILL BE LOCATED BEHIND RETAINING WALL NO. 26 AND MAY INTERFERE WITH SOIL NAILS. SUBMIT PROPOSED CONSTRUCTION METHODS FOR THESE FOUNDATIONS WITH THE SOIL NAIL WALL CONSTRUCTION PLAN.

EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES MAY INTERFERE WITH SOIL NAILS FOR RETAINING WALL NO. 26.

IT IS ESTIMATED THAT A MINIMUM SOIL NAIL LENGTH OF APPROXIMATELY 1.5H WILL BE REQUIRED FOR ADEQUATE GLOBAL STABILITY. ADDITIONAL LENGTH MAY BE REQUIRED FOR INTERNAL STABILITY.

PROJECT NO. R-5600
JACKSON COUNTY
STATION: 10+00.00 -WALL_26-
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SOIL NAIL WALL DETAILS AND NOTES WALL 26

NORTH CAROLINA PROFESSIONAL SEAL 030788 ENGINEER PU ZHANG

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	W-33
1	--	--	3	--	--	TOTAL SHEETS
2	--	--	4	--	--	46

DES BY: P. ZHANG	DATE : 02/25	DWG BY: B. PETERSON	DATE : 01/25
DES CHK: K. BUSSEY	DATE : 03/25	CHK BY: P. ZHANG	DATE : 02/25

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